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| 09/367,670      | 10/18/1999  | MICHAEL COVELEY      | SIM0065             | 4624             |

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EXAMINER

ODLAND, DAVID E

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/367,670

Applicant(s)

COVELEY ET AL.

Examiner

David Odland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The disclosure is objected to because of the following informalities:

On page 5 in regards to figure 2, lines 16 and 17, discloses of a host computer 18 and a communications server 12 but these labels seem to point to the same element in the drawing. Furthermore, it is not certain what the difference is between the communications server and the host computer.

Also on page 5 in regards to figure 2, lines 19 and 20 discloses of land-line based networks 22 but there is no item 22 in the figure.

Appropriate correction is required.

### ***Claim Objections***

3. Claims 8,12,14,15,17-19 are objected to as being dependent upon a rejected base claim (see claim rejections below), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2,3,7-9 and 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 2 recites of ‘virtual devices’ and a ‘virtual gateway’. It is unclear what is meant by *virtual* devices and *virtual* gateways. Furthermore, the claim recites, “...said virtual networks...” in line 3. There is a lack of antecedent basis for this limitation in the claim.

Claim 3 is rejected because it depends on claim 2.

Claims 3 and 11 recite that the processor converts the messages, ‘where appropriate’, and the postprocessor wraps the converted messages with headers, ‘where appropriate’. It is unclear where performing these functions is ‘appropriate’.

Claims 12-15 are rejected because they depend on claim 11.

Claim 7 recites, “...said preprocessor...” in lines 1 and 2. There is a lack of antecedent basis for this limitation of the claim.

Claim 8 is rejected because it depends on claim 7.

Claim 9 recites, “...said preprocessor...” in line 3. There is a lack of antecedent basis for this limitation of the claim.

Claim 13 recites “virtual gateway updates said protocol conversion information based on message traffic therethrough” in lines 2 and 3. It is unclear what is meant by ‘based on message traffic therethrough’.

Claim 16 recites that the wireless terminal includes a registry, in lines 9 and 10. It is unclear, if the server is used to convert between the protocols, why the wireless terminal has a registry.

Claims 17-19 are rejected because they depend on claim 16.

***Claim Rejections - 35 USC § 102***

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1,2 and 10, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent number 6,414,952 to Foley.

Referring to claim 1, Foley discloses of a communication system comprising of at least two communication networks (communications between a customer premise network and a device network [see claim 1]) over which communications between physical devices connected to said communication networks are to be carried (bi-directional communication between the networks takes place [see claim 1]), said communication networks implementing different protocols for messaging (a first protocol is associated with the customer premise and a second protocol is associated with the device network [see claims 1 and 2]) and a communication server acting between said communication networks (a virtual gateway server, using a network protocol translator, converts between the customer premise network and the device network [see column 3 lines 55-66 and claims 1 and 2]) and through which messages transmitted between said communication networks pass said communication server (messages between the two networks, pass through the sever [see column 3 lines 55-66 and claims 1 and 2]) including a knowledge base storing protocol conversion information (inherently, the server has some kind of 'knowledge base' or memory that stores information regarding the conversion of the signals

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between the two networks) , said communication server accessing said protocol conversion information in said knowledge base upon receipt of a message and converting the protocol thereof to a protocol compatible with the communication network to which said message is being sent (the gateway server converts the protocol of the customer premise network to the protocol of the device network [see claims 1 and 2]).

Referring to claim 2, Foley discloses of the communications system as discussed above. Furthermore, Foley discloses that the communication server includes virtual devices communicating with said communication networks (the virtual gateway server communicates with the different communications networks [see figure 14B]) and a virtual gateway bridging said virtual networks (the virtual gateway software bridges the device network and the customer premise network by converting the signals transmitted between the two networks [see figure 14B and claims 1 and 2]), said virtual gateway accessing said knowledge base and converting protocols of said messages (inherently, the virtual gateway software accesses some sort of memory or 'knowledge base' to fetch the instructions to perform the signal conversion between the two networks).

Referring to claim 10, Foley discloses of a communication server to act as a gateway for the transmission of messages between two virtual devices communicating with networks implementing different protocols (the virtual gateway server communicates with communications networks that use different protocols [see figure 14B and claims 1 and 2]), said communication server comprised of a knowledge base storing protocol conversion information to convert messages of one protocol to a different protocol (inherently, the virtual gateway software accesses some sort of memory or 'knowledge base' to fetch the instructions to perform

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the signal conversion between the two networks) and a virtual gateway accessing said protocol conversion information upon receipt of a message to be transmitted between said virtual devices and converting the protocol of said message to a protocol compatible with the network to which said message is being sent (when a signal from the customer premise network is detected the gateway converts the signal to the format of the device network [see claims 1,2 and 40]).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-6 and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Foley in view of U.S. Patent number 5,978,672 to Hartmaier et al., hereafter referred to as Hartmaier.

Referring to claim 4, Foley discloses of the communications system as discussed above in the 35 U.S.C. 102 (e) rejection of claim 1. Foley does not disclose that the one of the networks is a wireless network and that the other is a landline network. However, Hartmaier discloses of converting between protocols of two different networks wherein one of the communication networks is a wireless network and wherein one of the communication networks is a wired land-line network (an application which converts between a wireless protocol network and a wirelined protocol network [see abstract]). It would have been obvious to one skilled in the art at the time of the invention to utilize the method taught by Hartmaier in the system of Foley because, as Hartmaier points out in the abstract, such a method would allow for customized

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services without expensive switching and data handling devices. Furthermore, Hartmaier also points out in the abstract that the method can be used between many different networks, thereby increasing the flexibility of the system taught by Foley.

Referring to claim 5, Foley in view of Hartmaier discloses the communications system as discussed above. Furthermore, Hartmaier discloses that the messages transmitted over said wireless network, include API messages to be processed by destination physical devices (API messages to be transmitted over the wireless network are converted [see claim 28]) and target logical connection information specifying the destinations for said API messages (inherently, the 'target logical connection information specifying the destination' or the 'destination address' is included in the messages being sent to the wireless device).

Referring to claim 6, Foley in view of Hartmaier discloses the communications system as discussed above. Furthermore, Hartmaier discloses that the target logical connection information is included in a logical message header wrapping said API message (the converted messages include converting the protocol, signals and API [see claim 28]). Note, since the 'target logical connection information' is merely the address of the destination, it is inherent that the destination address is included in the header of the converted message.

Referring to claim 9, Foley in view of Hartmaier discloses the communications system as discussed above. Furthermore, Hartmaier discloses that messages transmitted over said land-line network are in the form of API messages (API messages are transmitted over the wireline network to be converted by a processor [see claim 28 and column 11 lines 28-31]), said preprocessor analyzing the API message of a message received from said land-line network for said target logical connection information (inherently, if the processor is to convert the API



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messages between the two networks each message would have to be analyzed for the destination address ('target logical connection information') in order to determine where to send the converted message).

9. Claim 16, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmaier in view of U.S. patent number 6,075,796 to Katseff et al., hereafter referred to as Katseff.

Referring to claim 16, Hartmaier discloses of a communication system comprised of a wireless network (a wireless network [see abstract]) at least one wireless terminal to transmit messages over said wireless network (at least one wireless terminal connected to the wireless network for communication to take place [see figure 2 and its corresponding description]) a land-line network (a wirelined network [see abstract]), at least one host computer connected to said land-line network to transmit messages over said land-line network (at least one computer attached to the wirelined network [see PC's in figure 2]) and a communication server providing communications connectivity for messages to be transmitted from one network to the other (a converter to convert messages from the wireless network to the wirelined network [see abstract]). Hartmaier does not particularly disclose that the converter includes a registry, which is used to store the information used to convert between the two networks. However, Katseff discloses of a server used to convert between different protocols wherein the server includes a registry, which contains the necessary mapping information to perform the conversion [see figures 4,5 and 6, their corresponding descriptions and column 6 lines 38-44]). It would have been obvious to one skilled in the art at the time of the invention to utilize the registry of Katseff in the system taught

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by Hartmaier because as Katseff points in column 6 lines 34 and 35, such a registry can be used for dynamic addressing.

*Conclusion*

10. The following prior art, which is made of record and not relied upon, is considered pertinent to applicant's disclosure:

- a. U.S. Patent Number 5809028 to Nethercott et al.
- b. U.S. Patent Number 6151390 to Volftsun et al.
- c. U.S. Patent Number 6278697 to Brody et al.
- d. U.S. Patent Number 6295297 to Lee.
- e. U.S. Patent Number 5894478 to Barzegar et al.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

Deo

August 16, 2002

  
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